
COURSE TIMES + LOCATION:

Mo 10:30 AM – 12:20 PM
SSCC 9002, Burnaby

We 10:30 AM – 11:20 AM
SSCB 9201, Burnaby

EXAM TIMES + LOCATION:

Dec 10, 2021
8:30 AM – 11:30 AM
WMC 3260, Burnaby

INSTRUCTOR:

Liangliang Wang
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PREREQUISITES:

STAT 285, MATH 251, and one of MATH 232 or MATH 240, all with a minimum grade of C-.

Description

CALENDAR DESCRIPTION:

Review of probability and distributions. Multivariate distributions. Distributions of functions of random variables. Limiting distributions. Inference. Sufficient statistics for the exponential family. Maximum likelihood. Bayes estimation, Fisher information, limiting distributions of MLEs. Likelihood ratio tests. Quantitative.

COURSE DETAILS:

1. Review of Probability and Univariate Distributions
2. Multivariate Distributions
3. Distributions of Functions of Random Variables
4. Limiting Distributions
5. Inference. Sufficient Statistics for the Exponential Family.
6. Maximum Likelihood, Limiting Distributions
7. Bayes Estimation
8. Fisher Information
9. Likelihood Ratio Tests

This course is accredited under the Canadian Institute of Actuaries (CIA) University Accreditation Program (UAP). Details of required courses and grades at Simon Fraser University are available here (https://www.cia-ica.ca/membership/university-accreditation-program-home/accredited-universities/accredited-university-detail?pav_universityid=236ca8c4-60e5-e511-80b9-00155d111030).

In addition to the specific university's internal policies on conduct, including academic misconduct, candidates pursuing credits for writing professional examinations shall also be subject to the Code of Conduct and Ethics for Candidates in the CIA Education System and the associated Policy on Conduct and Ethics for Candidates in the CIA Education System. For more information, please visit Obtaining UAP Credits (<https://www.cia-ica.ca/membership/university-accreditation-program-home/information-for-candidates/obtaining-uap-credits>).

Grading

Assignments

Midterms (2 midterms)

Final Exam

NOTES:

Materials

REQUIRED READING: